

CLAIMS

1. A method of writing a file (FTS) in a memory medium, the file comprising a determined number of data records (E1, E2, E3), each record having a determined size, characterized in that, with a determined number of memory spaces (A0, A1, A2, A3, A4) of the memory medium being allocated to write the data of the file records, the position of each memory space being determined, and the number of memory spaces allocated exceeding the total number of records in the file,
 - the data of each file record is written in a memory space taken from the allocated memory spaces,
 - a descriptor (ITS1) of the file is written in the memory medium, the file descriptor referencing memory spaces taken from the allocated memory spaces to enable the allocated memory space in which the data of each file record is written to be determined.
- 15 2. A method of updating a file (FTS) written in a memory medium, the file comprising a determined number of records (E1, E2, E3) of determined sizes, some of these records (E2, E3) being intended to be updated with new data (d4, d5) replacing old data (d2, d3), characterized in that, with a determined number of memory spaces (A0, A1, A2, A3, A4) of the memory medium being allocated to write the data from the file records, the position of each memory space being determined, the number of allocated memory spaces exceeding the total number of file records, the data of each file record being written in a memory space taken from the allocated memory spaces, a first descriptor (ITS1) of the file being written in the memory medium, and the file descriptor referencing memory spaces taken from the allocated memory spaces to enable the allocated memory space in which the data of each file record is written to be determined:
 - the file descriptor is read,
 - the free allocated memory spaces (A0, A2) are deduced from this,
 - the new data (d4, d5) is written in memory spaces taken from the free allocated memory spaces,
 - a new descriptor (ITS2) of the file is written in the memory medium, the new descriptor referencing the memory spaces (A0, A2) in which

the new data (d4, d5) is written in place of the memory spaces (A1, A4) in which the old data (d2, d3) is written.

3. A method of writing or updating as claimed in any one of the preceding
5 claims, characterized in that the records of a file, for which a group of
memory spaces is allocated, all have the same size.
4. A method of writing or updating as claimed in any one of the preceding
claims, characterized in that the descriptor is encoded by a number
10 representing an arrangement index in a predetermined table, said table
containing all the possible arrangements of the records of the file in the
allocated memory spaces.
5. A method of writing or updating as claimed in any one of the preceding
15 claims, characterized in that a seal is stored, associated with the data of each
descriptor, the seal being an increasing function of the number of zero bits in
the descriptor.
6. A method of writing or updating as claimed in any one of the preceding
20 claims, characterized in that a sequence number is stored, associated with
each descriptor.
7. A method of writing or updating as claimed in claim 7, characterized in that
the sequence number is encoded on two bits.
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8. A method of writing or updating as claimed in any one of the preceding
claims, characterized in that the free memory spaces are not referenced to
minimize the size of the file descriptor.
- 30 9. A method of writing or updating as claimed in any one of the preceding
claims, characterized in that the new descriptor (ITS2) is copied to the first
(ITS1) to perform a ratification.
- 35 10. A method of allocating memory spaces (A0, A1, A2, A3, A4) of a memory
medium, characterized in that:

- a group of records (E1, E2, E3) of data (d1, d2, d3) is selected, these records belonging to one or more files (FTS), the data (d1, d2, d3) of these records being intended to be written in the memory medium, the group of records comprising a determined number of records, each record of the group having a determined size,
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- a number N of memory spaces is determined, the number N exceeding the number of records in the group of records, the number of excess memory spaces P being at least equal to the maximum number of records of the group of records likely to be updated
10 simultaneously in a write operation;
- a group of memory spaces is chosen, comprising N memory spaces, the memory spaces of the group forming the memory spaces allocated to write the data of the selected records, each memory space in the group having a determined size and a determined position, the size of
15 the memory spaces being sufficient to write into them the data (d1, d2, d3) from the records (E1, E2, E3) of the group.